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"WORKING ON THE WATER"

SCHOONER *Wanderer*

OLD DARTMOUTH HISTORICAL SOCIETY

NEW BEDFORD WHALING MUSEUM

MADE POSSIBLE BY FUNDING FROM

NLAND FOUNDATION, INC.

WITH ADDITIONAL SUPPORT FROM

MASSACHUSETTS DEPARTMENT OF EDUCATION

AND IN PART WITH FUNDS DONATED IN MEMORY OF

JOHN G. MORLEY BY HIS DAUGHTER, HELEN

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"WORKING ON THE WATER"© SCHOONER *Wanderer* OLD DARTMOUTH HISTORICAL SOCIETY NEW BEDFORD WHALING MUSEUM

"WORKING ON THE WATER"

sponsored in part with funds donated in memory of
JOHN G. MURLEY by his daughter, Helen
and funding from the
ISLAND FOUNDATION, INC.
with additional support from the
MASSACHUSETTS DEPARTMENT OF EDUCATION

ISLAND FOUNDATION offers funding to educational and environmental programs and it has regularly supported "... city-based programs which encourage an active and responsible citizenry." This citywide fourth grade program of New Bedford Public School System brings youngsters to the historic waterfront and involves them in activities and discussions addressing the past, present, and future of New Bedford Harbor, environmental and stewardship issues, and the impact of immigration, economic trends, and changing technologies.

MASSACHUSETTS DEPARTMENT OF EDUCATION (DOE) support for "Working on the Water" is focused on the implementation of concepts and approaches found in the DOE Science and Technology Curriculum Frameworks for fourth grade level students. Program development has taken place in collaboration with the New Bedford Leadership Team of the Partnership for the Advancement of Learning Math and Science (PALMS) which is supported by the National Science Foundation (NSF).

MASSACHUSETTS SCHOONER ERNESTINA COMMISSION is charged with the responsibility to preserve, restore, and operate the historic Schooner *Ernestina* ex *Effie M. Morrissey* and to establish educational, cultural, and experiential programs in a context that celebrates human diversity, creativity, value, and dignity. The Schooner provides dockside and underway educational programs to communities and school systems along the coastline, from Cape Ann to Narragansett Bay.

THE OLD DARTMOUTH HISTORICAL SOCIETY welcomes groups to explore the 19th century world of whaling. The New Bedford Whaling Museum was founded in 1907 to tell the story of American whaling as well as the social and cultural history of the original Old Dartmouth area that now consists of New Bedford, Westport, Dartmouth, Fairhaven and Acushnet.

NEW BEDFORD WHALING MUSEUM

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"WORKING ON THE WATER"

COOPERATING PARTNERS:

SCHOONER *Ernestina*
OLD DARTMOUTH HISTORICAL SOCIETY-
NEW BEDFORD WHALING MUSEUM

SPONSORS:

in memory of John G. Murley by his daughter, Helen
Island Foundation, Inc.
Massachusetts Department of Education

AUDIENCE:

4th Grade New Bedford Public School Students

FOCUS:

A collaborative program focusing on two vessels (the whaling bark and the fishing schooner) which compares their work, their technology, and the social history of their eras. Activities were planned with regard to the Massachusetts Department of Education (DOE) Curriculum Frameworks for Mathematics and Science and Technology.

ASSUMPTIONS:

FROM DOE SCIENCE AND TECHNOLOGY CURRICULUM CONTENT CHAPTER, "OWNING THE QUESTIONS," MAY 1995 DRAFT

- Science involves the discovery of fundamental relationships that help explain the natural world...fundamental questions include, *"What do I observe?" "What is its nature?"* and *"What if?"*
- Technology...created tools that expand our capacities and help us solve problems. It extends human potential for controlling the natural and human-made environment. The domain of technology asks fundamental questions such as *"How does this work?" "How can this be done?"* and *"How can this be done better?"*
- ...most science advance can be traced to improvements in technology. Similarly, technical advances often occur when scientific understandings have been applied to a particular problem.
- ...science and technology are not abstract subject areas but integral parts of our daily lives, and they have significant impact on human life and the life of the planet. Questions like, *"What are the implications of this?" "Who benefits and who (or what) suffers?"* and *"What should [people] do about this?"* set science and technology in the context of human affairs.

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A BRIEF HISTORY

OF TWO SHIPS: THE *LAGODA* & THE *ERNESTINA*

Just as people have many chapters in their lives, ships have many stories, as well.

LAGODA

The name *Lagoda* was the result of a mistake. The intention was to name her after the Lake Ladoga in Russia, but the interchanged consonants were never corrected. It is a sailors' superstition that any change in spelling or name will bring bad luck.

Built in 1826, the *Lagoda* spent her first fifteen years in the merchant service. Much of her trade was transporting cargo between the port of Boston and ports along the California coast. The *Lagoda* is mentioned several times in *Two Years Before the Mast* written in 1840, by Richard Henry Dana, Jr.

In 1841, the *Lagoda* was purchased by Jonathan Bourne, Jr., of New Bedford. He had her converted from a merchant ship to a whaler by adding the tryworks, special whaling gear and five whaleboats. Over the years, the *Lagoda* became Mr. Bourne's favorite ship. In the twelve whaling voyages she made while under his management almost all were very successful.

Realizing that the great days of whaling were over, Jonathan Bourne sold the *Lagoda* in 1886. Under new ownership, she continued to go whaling until 1890. After being much damaged by a storm, the *Lagoda* was found unfit for further service at sea. Used as a coal hulk for nine years, the *Lagoda* burned and was destroyed in 1899.

Today you can visit a replica of the *Lagoda*, the largest ship model in the world, at the New Bedford Whaling Museum. Emily Bourne, as a memorial to her father Jonathan Bourne, Jr., gave the half-scale model of the *Lagoda*, and the building that houses it to the Museum in 1916.

ERNESTINA

On February 5, 1894, a single line of type in a corner of the *Gloucester Daily Times* recorded the addition of a schooner to the Massachusetts fishing fleet: "The new schooner...has been named *Effie M. Morrissey*." This marked the commonplace birth of a schooner that would become famous not only as a banks fisherman, but also as one of the great expedition vessels of arctic exploration, as a venerable trans-Atlantic immigration packet, a symbol of Cape Verdean-American history and heritage, and as an active educational and

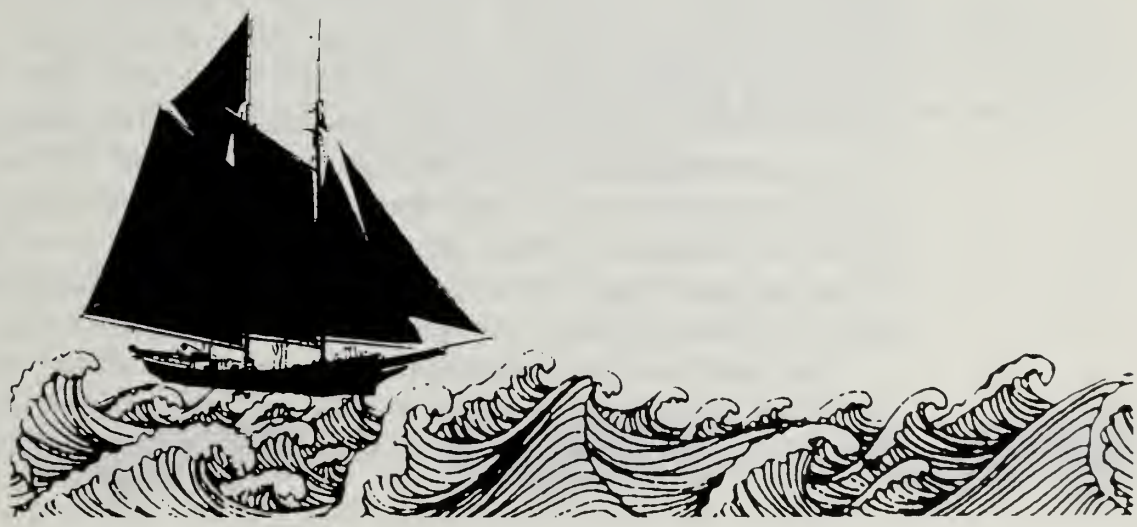
continued

cultural resource serving the New England region. From 1894 to 1924 *Effie M. Morrissey* was active in Gloucester fishing.

In 1924 Captain Robert Bartlett bought the *Effie M. Morrissey*. Bartlett was an experienced captain and ice navigator who had skippered Admiral Peary's ship, the *Roosevelt,* on the famous expeditions in quest of the North Pole. In 1926, "Captain Bob" Bartlett persuaded George Palmer Putnam, a well known publisher, to fund an exploratory trip to Greenland. This was the beginning of the *Effie M. Morrissey's* twenty year career as an arctic exploration vessel. The *Effie M. Morrissey* voyaged north with George Putnam and his son David. The voyage inspired David Putnam's *David Goes to Greenland* (1926), first in a series of popular children's books telling of David's adventures on board the *Effie M. Morrissey*. Captain Bartlett died in 1946.

After purchasing the *Effie M. Morrissey,* Henrique Mendes, a veteran captain, placed her in the Cape Verdean packet trade and in honor of his daughter, changed her name to *Ernestina*. Between 1948 and 1959 the *Ernestina* made regular trips across the Atlantic between the Cape Verde Islands and Providence, Rhode Island. The ship carried cargo and passengers back and forth across the Atlantic. As a result of an agreement between Captain Mendes and cranberry growers, many immigrants came to America to work in the cranberry bogs.

After the inauguration of steamship service to the Cape Verde Islands, there was less call for the *Ernestina* to make trans-Atlantic passages. The newly formed Republic of Cape Verde government decided to rebuild the ship and give her to the United States as a symbol of the ties of friendship uniting the two countries. In August of 1982, the *Ernestina,* her hull completely rebuilt, sailed to the United States with a crew of Cape Verdeans and Americans. In 1986 the *Ernestina* was granted designation as a National Historic Landmark.



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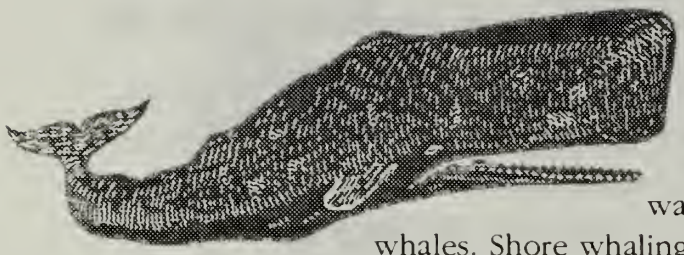
WHALING IN NEW BEDFORD



In the beginning of New Bedford whaling, it was not necessary to go far out to sea to capture whales. Shore whaling, with look-out towers dotting the coast, was the primary means of pursuing migrating whales. Small boats were launched from the beaches; the captured whale was towed back to shore and processed on land. When the number of whales near shore began to decline, it was necessary to build ships to travel farther out to sea. As the market for whale products increased, whalemen undertook longer journeys. As ships began to explore the southern Atlantic and beyond, they laid the groundwork for the growth and wealth of the whaling industry. When New Bedford was incorporated as a city in 1847, the Latin motto, "Lucem Diffundo" meaning "we spread the light," was selected to reflect the home of the world-wandering whalemen and the industry that made the city so prosperous.

As whaling activity increased, allied trades emerged. Among those who supported and contributed to the growth and wealth of New Bedford were ship and whaleboat builders, caulkers, coopers, riggers, rope makers, sail makers as well as candle makers, oil refiners, bakers, chandlers, merchants and bankers. The industry provided employment not just for those who went to sea, but also for those involved in the diversity of land-based supporting trades.

The preparation for a voyage required the complete outfitting of the ship. The managing owner or agent of a whaleship was responsible for overseeing this job. He had a checklist of goods covering every anticipated need. Ishmael in *Moby Dick*, chapter 20, comments on the need for "three-years' housekeeping upon the wide ocean, far from all grocers, coster-mongers, doctors, bakers, and bankers ...For besides the great length of the whaling voyage, the numerous articles peculiar to the prosecution of the fishery, and the impossibility of replacing them at the remote harbors usually frequented, it must be remembered, that of all ships, whaling vessels are the most exposed to accidents of all kinds and especially to the destruction and loss of the very things upon which the success of the voyage most depends. Hence, the spare boats, spare spars, and spare lines and harpoons, and spare everything, almost, but a spare Captain and duplicate ship."

The agent was also responsible for providing the officers and crew. Whalemen did not receive wages. Instead, they were paid an agreed-upon share of the profits of the voyage, known as a "lay." If the voyage turned

continued

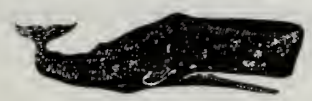
out to be a financial failure, the lay system protected the owners from having to pay the crew. The captain, mates and harpooners usually received lays ranging from 1/8 to 1/100. Experienced seamen received from 1/100 to 1/160. Inexperienced greenhands and boys might receive between 1/160 to 1/200 and lays as low as 1/250 to 1/350 were not unknown.

Before setting sail, crew members needed to purchase the supplies and clothing they would need for the voyage. A typical list of goods would include one or two jackets, an oil suit, an assortment of heavy and light trousers, shirts, underwear, shoes and socks. A sea chest containing needles, extra buttons, a tin spoon and a tin plate, a knife and belt, soap, blankets, a bedtick [a light mattress] and a pillow filled with hay would complete the seaman's supply. Since most of the men shipping out on a whaler did not have the money to pay for these supplies, the cost would be covered by the ship's agent and subtracted with interest from the lay at the end of the voyage.

The life of a whaleman was a difficult one, involving danger, hardship, and often loneliness. Yet many seamen came from all parts of the country, enticed by thoughts of the excitement and rewards of life at sea. Pamphlets extolling the adventure of whaling lured many young men, who all too often discovered that life aboard a whaler was not what they expected.

The discovery of petroleum in 1859 contributed to the decline of the whaling industry. Kerosene - distilled from petroleum - provided an inexpensive fuel that burned efficiently in lamps. By this time natural gas was also being used as an illuminant. In 1879, when Thomas Alva Edison created the first commercially practical incandescent lamp, whale oil was used primarily as a lubricant and no longer for lighting.

Although the whaling story is only one segment of New Bedford's proud past, it is still part of its identity. The damp ocean climate helped the city move on to become a major cotton textile producer. The city is now one of the nation's leading fishing ports. The sea will always play an important role in the life of the people of New Bedford.



WHALING

THE CAPTURE AND PROCESSING OF WHALES

I. CAPTURING THE WHALE

1. The whale was sighted by a whaleman stationed at the masthead.
2. Whaleboats with six men each were lowered from the ship to pursue the whale. When the whale was reached a harpooner darted his weapon forcefully into the whale. Usually the whale dove deep taking out many feet of line attached to the harpoon.
3. On surfacing to breathe, the whale would then swim rapidly on the surface, pulling the whaleboat behind, this was called a "Nantucket Sleigh-Ride." Eventually he tired and when the boat crew pulled in close there was an opportunity to kill the whale with a lance.

II. CUTTING IN

1. When brought to the ship, the whale was made fast on the starboard side [right side] under a plank platform on which men stood to work with cutting spades. With these sharp instruments the whale's blubber, a blanket of fat several inches thick, was separated from the body and brought aboard very much as one would peel an orange.
2. Once aboard, the blubber was cut into smaller sections called "horse pieces" and again into smaller pieces called "Bible leaves" because they were sliced nearly through in many places and resembled the leaves of a book.

III. PROCESSING [TRYING OUT]

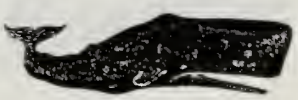
1. Aboard the ship were two iron pots set in brick-work with a place for fire underneath. These tryworks received the "Bible leaves" and through the heat the fat was soon turned into oil which was then cooled and placed in casks.
2. When brought ashore, the oil was strained and bleached in preparation for the market where it was used mostly in oil lamps.
3. From sperm whales, in addition to blubber, a large quantity of oil was taken from the head. This had much wax in it which was separated from the oil and made into candles.

continued

4. Primarily from bowhead and right whales came baleen, another valuable product which was known as "whalebone." It was used for purposes requiring strength and flexibility, such as umbrella ribs, buggy whips, corset stays, and fishing rods.

THOUGHT QUESTION

"It is the harpooner that makes the voyage." - Moby-Dick.
What do you think that statement means? Do you agree? Disagree? Explain.



FISHING

ON SCHOONER *ERNESTINA*
ex, *EFFIE M. MORRISSEY*

When she was built and launched in Essex, Massachusetts, over 103 years ago, Schooner *Ernestina* was called by another name, *Effie M. Morrissey*. Here is a brief history of the *Effie M. Morrissey* as a fishing schooner. It tells of the work she did and the people who used her as a tool to make their living. Throughout this history you may find technical terms, nautical jargon and geographical place names with witch you are not familiar. Please refer to the pages that follow for "missing information", and as you learn about the historical background of the schooner you can likewise prepare yourself and your students regarding her technological past.

The *Effie M. Morrissey* was built in Essex, Massachusetts, during the winter of 1893-94 and was launched on February 1, 1894. The Tug, *Startle,* towed her around to Gloucester to fit for sea.

The *Effie M. Morrissey* was built for the John F. Wonson Co. and Captain William E. Morrissey. She was named for Capt. Morrissey's 12-year-old daughter, Effie. Compared to other fishing schooners in the Gloucester fleet, she was medium-sized and was patterned after the model of the Schooner *Mable D. Hines* with a fine clipper bow.

The *Effie M. Morrissey* sailed on her maiden trip salt banking, in command of Capt. Morrissey, March 14, 1894. She arrived back in Gloucester on July 28, 1894, with a fine fare of 250,000 pounds of salt cod. The trip was sold to the C.W. Wonson Company. On November 8 of the same year she returned from a second cruise on the Grand Banks with 320,000 pounds of salt cod.

The *Morrissey* sailed under Capt. Morrissey about a year, but in April, 1895, the captain became ill and the vessel was taken over by his nineteen-year-old son, Clayton. "Clayt", as he was called, was an experienced hand, but this was his first command. He remained skipper of the *Morrissey* for the rest of the year, making two salt bank trips. At the end of the year Capt. William Morrissey returned to the helm and took the vessel to Newfoundland and the herring fishery. The *Morrissey* returned to Gloucester on January 25, 1896, with 860 barrels of herring from Placentia Bay.

In the season of 1897 and 1898, the *Morrissey* was a "seiner" (*see vocabulary: seine net.*) During the Portland Gale (November, 1898), the

continued

Morrissey went ashore in Smith's Cove, Gloucester. She had broken adrift from John F. Wonson's wharf together with schooners *Meteor, Reporter, Marguerite* and *Belle Franklin*. The *Morrissey* was floated later, with little damage. Capt. John McInnis then took her to Newfoundland for herring, returning in January, 1899. The rest of that year found the *Morrissey* in command of Capt. McInnis who had her dory handlining.

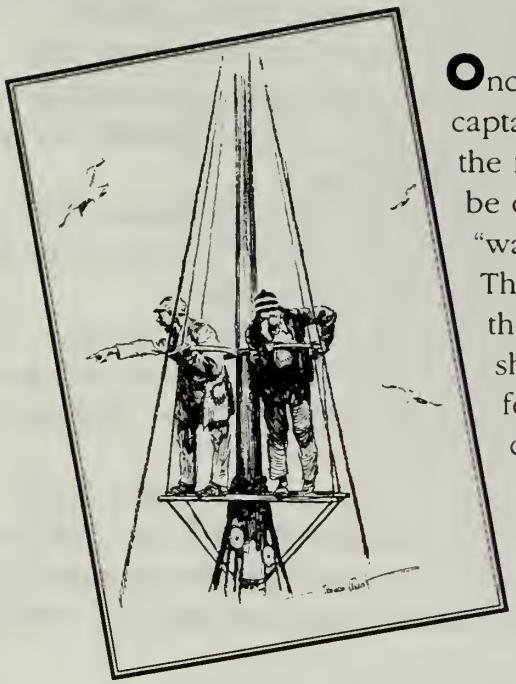
Capt. Joshua Stanley was her next skipper and from September, 1900, to September, 1901, he stocked $30,000 with a share of $780 per man. This was a magnificent year's work in the haddock fishery at that time.

Capt. Stanley gave up the *Morrissey* in September 1901, as his new schooner *Lizzie M. Stanley* was nearly ready. Capt. Henry Atwood was the next commander of the *Morrissey*, still in pursuit of haddock. In 1903 she fished the banks under Capt. William Harding.

The *Effie M. Morrissey* was sold to Capt. Ansel Snow of Digby, Nova Scotia, in March, 1905. She was kept under American registry, but sailed out of Digby with a Canadian crew. On July 5, 1908, the *Morrissey* arrived at Gloucester with 200,000 pounds of fish from the Bay of Fundy. This was her first visit in three years.

DAY-IN-THE-LIFE

WATCH, WATCH, WORK, WORK



Once the whaleship left home port for a long voyage, the captain and officers needed to get the crew organized. On the first day out, the whole crew was called on deck to be divided into two work shifts. These shifts called "watches," were headed by the first and second mates. The officers made alternative choices until all names on the crew list were selected. There were seven work shifts or watches in a twenty-four hour period, five of four hours and two of two hours. The short watches, called "dog watches," allowed the men to change the order of their work shift each day. A whaleship sailed night and day without stopping, and half the men generally worked four hours on their watch, then slept four hours while the other watch took over.

STARBOARD WATCH	
4 p.m. to 6 p.m.	= 2 hours
8 p.m. to 12 midnight	= 4 hours
4 a.m. to 8 a.m.	= 4 hours
12 noon to 4 p.m.	= 4 hours
TOTAL	= 14 hours

PORT WATCH	
6 p.m. to 8 p.m.	= 2 hours
12 midnight to 4 a.m.	= 4 hours
8 a.m. to 12 noon	= 4 hours
TOTAL	= 10 hours

The watches on deck from 8 a.m. to noon and 12 noon to 4 p.m. were spent scrubbing the decks and taking care of equipment: sails, line, masts, yards, and the tools needed for whaling. Three men were always at the mastheads as look-outs for whales, and one man was at the wheel. Meals were taken either at the end of the watch or before the watch started. The dog watches were for eating, recreation, relaxation and putting the ship into condition for the night. During the morning watch, from 4 a.m. to 8 a.m. preparations for the day were started, look-outs posted, decks cleaned, equipment checked and breakfast eaten.

continued

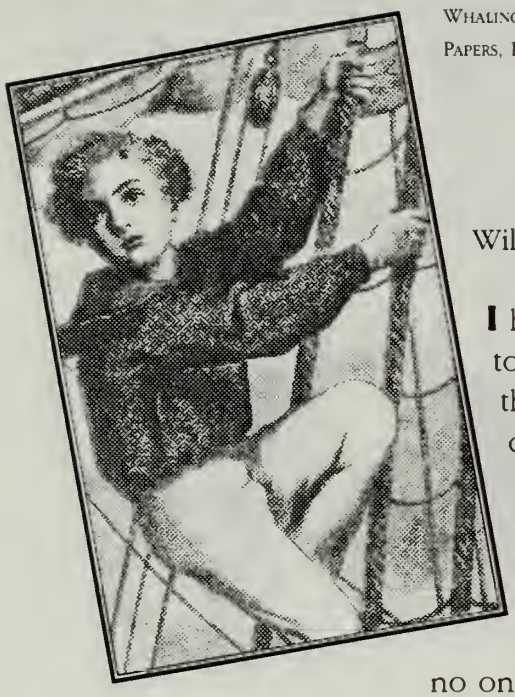
The purpose of a whaling voyage was to find, kill, and process whales. When a look-out called "There She Blows!", all hands from both watches were expected to lower the whaleboats and chase the whales. The shipkeepers, a small group of men, including the blacksmith and cooper, were left behind to handle the ship.

COMPILED FROM: *THE AMERICAN WHALEMAN*, ELMO P. HOHMAN, A.M. KELLEY PUBLISHERS, CLIFTON, N.J., 1972
WHALES, ICE AND MEN, JOHN R. BOCKSTOCE, UNIVERSITY OF WASHINGTON PRESS, SEATTLE & LONDON, 1986

DAY-IN-THE-LIFE

A LETTER HOME from Will Woods, Greenhand

LETTER FROM MANUSCRIPT HELD IN THE COLLECTION OF THE OLD DARTMOUTH HISTORICAL SOCIETY WHALING MUSEUM LIBRARY, 18 JOHNNY CAKE HILL, NEW BEDFORD, MA. 02740: WILLIAM H. WOODS PAPERS, B84 -31. FOLDER 1. COPIED AS WRITTEN IN 1878 WITH NO CORRECTIONS (SPELLING, GRAMMAR, ETC.)



AT SEA MAY 26 1878

Will Mose

I have now got an oppotunity to write you a few lines to let you know that i am alive and kicking hopeing this letter will find you the same way i am a lucky dog to feel all right for first whale i went on came very near fixing the whole boats crew we came as near death as i want to go the way the old whale kicked round was a caution to us he turned the boat bottom side up and of course we could not get out of his way so he had us at his mercy but no one got hurt the second mate took our line and we made out to save the whale the worst part of it was we had nothing to eat from seven oclock till till twelve that night and working hard all day and night to if you know when you are well off you will stay on land but if you should ever feel like going to sea take my advice and not come whaleing but go on a merchant ship on a coasting there you are in port quite often but on a whaler you have to stay out at sea seven or eight months at a time and another thing you never make any thing the first voyage now you wait till you get to be an officer then you will not only get money fast but- good grub while the poor fellows fore the mast get nothing but salt junk and hard tack and i can tell you that the meat does not always smell the best. 50 dollars would not hire you to take a bite of it at home i have seen the hard tack crawl two feet away from the fellows that were eating it it was so full of maggots and meat the same and i dont think you care much about eating live food if you dont you had better stay away from whaling i was going to run away from her in St Helena but the old man was to sharp for me as well as the rest i intend to leave her the first chance i get i like the whaleing part well enough but it is the confinement that i hate and a nother thing i am going to leave her for is that the whole crew knocked off duty and all but four of us went to work again they put us four in irons and so i know that it no use for me to try and go whaleing any more i had a good

continued

chance to get along fast for all the officers thought a good deal of me but being put in irons killed my name it was very foolish in me to hang out when all the rest went to work but i did not know it till it was to late if you ever go to sea dont be ruled by the sailors for they are all the time growling about the officers and ship you must not let my folks know about this how is all the folk about Medway tell Piper the reason i did not write to him was because i have not got paper but will write to him the first time i get a chance after getting some paper i can not write any more this time for want of paper so must Close by sending my respects to all from your old Chum

WILL WOODS

DAY-IN-THE-LIFE

SCHOONER *Lady Elgin*

A working day in 1887 for hand-line dory fishermen FROM *Going Fishing*

WESLEY GEORGE PIERCE WROTE THE FOLLOWING ACCOUNT OF A WORKING DAY IN 1887 FOR HAND-LINE DORY FISHERMEN SAILING OUT OF GLOUCESTER. HE WAS ABOARD THE SCHOONER *LADY ELGIN*, A SHIP VERY SIMILAR TO *ERNESTINA (EX EFFIE M. MORRISSEY)*. *LADY ELGIN* WAS ALSO BUILT IN ESSEX AND, LIKE *ERNESTINA*, WAS CENTRAL TO A FAMILY BUSINESS OPERATION: PIERCE'S FATHER WAS THE CAPTAIN OF THE *ELGIN*. IT IS LIKELY THE PIERCE FAMILY AND THE MORRISEY FAMILY WERE WELL ACQUAINTED IN THE CLOSE-KNIT COMMUNITY OF GLOUCESTER FISHING FAMILIES.

ON GEORGE'S BANK 1887

On Monday morning, at 4 A.M., the cook of the *Elgin* blew his whistle and called out loudly: "Starboard gang turn out for breakfast!" Our vessel carried fourteen dories so we had seven on each side, called the "starboard-gang" and the "port-gang." While the starboard-gang were eating their breakfast, the port-gang turned out, put on their boots and oil-clothes, went on deck and hoisted out their dories [out of the schooner, into the water]. By the time they had this work done the starboard-gang had eaten and come on deck, and while we were hoisting out our dories the port-gang went to breakfast. When they had eaten, they came on deck and all fourteen men got into their dories and left the vessel. We all rowed out in different directions and when a short distance away anchored our dories and each man threw out his two lines and started fishing. We fished until 9:30 A.M. when the skipper set the signal for the crew to come aboard the vessel for dinner [lunch]. In clear weather the signal calling the dories was a bushel basket hoisted up on the foretop-ping-lift, fifteen feet above deck. In foggy weather a small cannon was sometimes fired or a large conch shell was used as a trumpet to call in the dories.

When the first dory came alongside, the skipper took the dory-painter [a line tied to one end of the dory] and passed the man a pitchfork: then held the dory alongside while the man pitched his fish out of the dory and onto the deck of the schooner, he counting the number out loud, and when all the fish were out, the skipper put the amount down on *his board*, under the man's name, for all hand-line fisherman fish on shares. The cook held the dory-painters on the port side, and when each man had finished his count of fish, the cook would report the amount to the skipper.

After eating a hasty dinner [lunch] we went out again and fished until 3 P.M., when the signal again called us aboard for supper. When alongside we pitched our fish out on deck, then hoisted our dories in, nesting them on top of the cabin house where they were out of the way, for the deck was full of fish, sometimes 50 or 60 tubs.

continued

We ate our supper and then started dressing down [cleaning] our fish caught that day. On the *Elgin*, we had four dressing gangs of three men each, and three salters in the hold. The cook had enough to do without dressing any fish. The three men in each gang are called the throater, gutter, and splitter. The throater cut off the head of the fish and threw it overboard and opened the fish's belly. He then passed the fish on to the gutter who pulled out the liver, dropped it into a basket, then pulled out the viscera and threw it overboard, pushing the fish across to the splitter. The splitter cut along the length of the fish and opened it up flat then dropped it into the splitting tub. When the split fish were soaked clean in the tub which had been partly filled with salt water, they were pitched into the hold.

The salters placed the fish in the fish pens, back down, flat open, napes [necks] and tails alternating and then covered them with a scoop full of salt. Salting a trip of fish is an important operation and requires good judgement on the part of the salter, for on him depends the successful completion of a good salt trip. He must know how much salt the large fish require so that they will come out right and not be "slack" or "strong," if he uses too little. If too much, they will come out of the hold "dry-as-a-chip"; also, if he uses too much it is wasted and there will not be enough to complete a full trip.

When our fish were all dressed, we washed down decks and pumped out the vessel, for the salted fish settling in the hold had made a lot of pickle since the night before. Then all went below in the fo'cas'le (except the one hand keeping the anchor watch) and "mugged up." The term "mug up" means that we take a mug and fill it with hot coffee or tea, for large pots of coffee and tea are always kept full and hot on the range, made ready by the cook. Then we go to the "shack-cupboard" which is kept well filled with bread, butter, milk, sugar, meat, doughnuts, cake, and pieces of pies left over from the table, where we can get what we want to eat.

After "mug ups" we turned in, calling it a day's work for it was then 9 P.M. and we had been up working since 4 A.M.

Pierce, Wesley George. *Going Fishing* International Marine Publishing Company. Camden, Maine. 1989.

ACTIVITY SHEET

A FUNCTION OF TIME

	Lagoda in the 1850's	*Ernestina in the 1890's*	*In your Home at the present time*
4:00 A.M.- 8:00 A.M.			
8:00 A.M.- 12:00 P.M.			
12:00 P.M.- 4:00 P.M.			
4:00 P.M.- 6:00 P.M.			
6:00 P.M.- 8:00 P.M.			
8:00 P.M.- 12:00 A.M.			
12:00 A.M.- 4:00 A.M.			

Fill in the data collection sheet for what crew members did during a **"TYPICAL"** day. Fill in the information concerning your own day. Compare your day with theirs. Use different colored markers to code work in the three schedules. For instance, color in all areas which are **WORK** in red. With other colors, do the same thing for time spent **EATING**, **SLEEPING**, and at **LEISURE** or **PLAY**.

FOOD FOR THOUGHT

FROM THE GALLEY OF A WHALESHIP

Meals aboard a whaleship were not exactly nutritious, attractive, or varied. They were prepared for a crew of about thirty by a cook who was often inexperienced in the galley.

When a whaler was outfitted for a voyage that might last three or four years, it often carried live pigs, goats, and chickens kept on deck in pens. Without refrigeration, fresh fruits and vegetables rotted quickly in warm climates; bread turned stale, hardened and was attacked by bugs as the trip lengthened. Butter turned rancid.

The main item in most meals was "salt horse" or "salt junk", the whalemen's name for salt beef or pork. It was kept in a special cask used by the cook to soak salted meat before cooking it. Located near the galley, the cask earned the name "Harness Cask" because sailors, tired of bad tasting and monotonous fare, jokingly insisted that the meat was not beef or pork, but horse.

A TYPICAL DAY'S MENU:

BREAKFAST consisted of "salt horse", hard bread, coffee and molasses.

DINNER at noon, the lightest of the three meals served daily, also consisted of "salt horse", bread and coffee.

SUPPER in the evening was the same. Officers usually could expect some butter, warm bread, tea, occasional pie of hash.

All crew members usually used molasses for sweetener as it was less expensive than sugar.

A TYPICAL MENU FOR THE WEEK:

Meals did not vary much from week to week. On one voyage, this is what the crew regularly received:

MONDAY	- beans
TUESDAY	- rice
WEDNESDAY	- potatoes
THURSDAY	- "duff"
FRIDAY	- rice
SATURDAY	- fish
SUNDAY	- "duff"

The officers ate in the officers' cabin. Ordinary crew members ate in the fo'c'sle or on deck, using a tin plate, cup, fork, spoon and sheath knife. Sometimes meals were served from buckets containing each food item on a first-come, first-serve basis. Often this would lead to arguments, so one crew member would dole out the food, making certain each man received an equal portion. Whale meat was not regularly eaten by the whalemen. It was considered unappetizing and tough to chew.

At the end of the meal, a crew member might chew tobacco or have a smoke, perhaps to take away the taste of the meal. Sometimes tobacco was given as a reward, but more often whalemen purchased it at the "slop-chest", the ship's store.

A RECIPE SAMPLER:

DUFF a dish, widely known at sea, made by boiling a quantity of flour, lard, and yeast in equal parts of fresh and salt water until the mixture was hard. Sometimes chopped salt pork was added. A crew looked forward to receiving duff and molasses at least once a week.

LOBSCOUSE a stew made of chopped hard bread, chopped meat and water, sprinkled with lots of pepper.

SEAPIES OR DOUGHBOYS a flour dumpling containing the meat and bones of porpoise. This was probably considered a treat since freshly harpooned porpoise would be a change from "salt horse."

When possible, ships made port for fresh food supplies. They traded goods for fresh fruit, vegetables, meat, and water. Lemons, limes, and oranges were particularly important for preventing a disease called scurvy. Caused by a prolonged salt diet and lack of fresh fruit and vegetables, containing vitamin C, scurvy was characterized by spongy and bleeding gums, bleeding under the skin, and extreme weakness. One vessel recorded one-half her crew dying of scurvy.

"WORKING ON THE WATER" SCHOONER *Ernestina* OLD DARTMOUTH HISTORICAL SOCIETY/NEW BEDFORD WHALING MUSEUM

WHALEMEN'S JOURNALS AND LOGBOOKS INCLUDE SUCH COMMENTS AS THESE:

"It was a common practice to soak the bread in hot tea or coffee in order to scold out the worms which were then skimmed off before drinking."

"Duff sometimes was so hard it was not only indigestible, but unchewable and more fit to be used as shot for storming forts and towns."

COMPILED FROM: *THE WHALE HUNTERS,* JOSEPH PHELAN, TIME LIFE BOOKS, NY, 1969.
THE AMERICAN WHALEMAN, ELMO P. HOHMAN, A.M. KELLEY PUBLISHERS, CLIFTON, NJ, 1972.

THOUGHT QUESTION

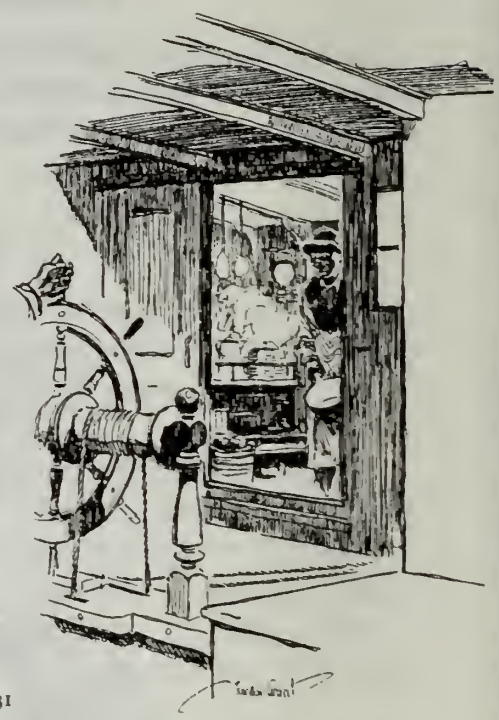
The food whalemen ate was far different from what the average fisherman is served and eats aboard ship today. What might be some of the reasons for this change? What discoveries and inventions affected some

FOOD FOR THOUGHT

THE HARNESS CASK

The salt meat was put aboard in large casks. It was so saturated with potassium nitrate [used to pickle meat] that it was unfit for food until it had been soaked for days in sea water. This was done in "harness casks." Usually two of these casks could be found near the ship's galley. They were made of teak or oak and bound with brass hoops. The cask got its name from the whalemen's story that the "old horse" it contained was cut up, harness and all.

Old horse! old horse! what brought you here?
From Sacarap' to Portland pier
I carted stone for many a year.
I labored long and well, alack,
'Til I fell down and broke my back.
They picked me up with sore abuse
And salted me down for sailor's use.
The sailors they do me despise,
They pick me up and damn my eyes,
They eat my flesh and gnaw my bones
And throw the rest to Davy Jones.



GORDON GRANT. *SAIL HO!* WILLIAM FARQUHAR PAYSON, NEW YORK, 1931

TYPICAL SALTBANKER MENU
1900 - 1920

OBTAINED FROM CLARENCE ALLEN (1882-1970) - LUNENBURG SALTBANK COOK

The Lunenburg Saltbank Fishermen were hearty eaters. Aboard their vessels they ate well and often. The high calorie, high protein diet was especially suited to their strenuous and often cold work. For those who felt hungry between meals, the shacklocker, a cupboard in the forecastle, was always well stocked with pastries, bread & butter, sugar; the coffee & tea pots remained hot on the stove 24 hours a day.

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Breakfast 4-7 a.m.	Oatmeal Porridge Baked Beans Hot Biscuits Bread, Butter Tea, Coffee with Sugar, Milk	Scouse Baked Beans Potato Hash Hot Biscuits Bread, Butter Tea, Coffee	Baked Beans Potato Hash Hot Rolls Bread, Butter Cookies, Cake Tea, Coffee	Scalloped Potatoes Baked Beans Hot Biscuits Cake, Cookies Tea, Coffee	Indian Meal Porridge Baked Beans Potato Hash Bread, Butter Cookies, Cakes Tea, Coffee	Baked Beans Potato Hash Cold Salt Beef Hot Biscuits Cookies, Cakes Tea, Coffee	Baked Beans Fish Hearts & Onions Potato Hash Bread, Butter Cookies, Cakes Tea, Coffee
Dinner 10-12 noon	Barley Soup Roast Salt Plate Beef Baked Potatoes Mashed Turnips Bread, Butter Loafcake, Cookies Lad in Bag, Lemon Sauce	Salt Plate Beef Stew Dough Boys Pea Soup Pumpkin Pie Cakes, Cookies Tea, Coffee	Baked Fish Baked, Boiled Potatoes Rice Pudding Bread, Butter Cookies, Cakes Tea, Coffee	Sauerkraut Mashed Potatoes Hurricane Soup Salt Plate Beef & Pork Fish Eyes Bread, Butter Cookies, Cakes Tea, Coffee	Pickled String Beans Mashed Potatoes Barley Soup Salt Plate Beef Salt Pork Pumpkin Pie Bread, Butter Cookies, Cakes Tea, Coffee	House Banking Apple Schnitz Pie Bread, Butter Cookies, Cakes Tea, Coffee	Hurricane Soup Turnip Kraut Mashed Potatoes Salt Plate Beef Apple Schnitz Pie Bread, Butter Cookies, Cakes Tea, Coffee
Supper. 4-5 p.m.	Kartoffelsuppe Raw Sauerkraut Baked Beans Potato Hash Cold Salt Plate Beef 6-8 Kinds of Cookies, Cakes	Baked Beans Potato Hash Fish Chowder Loafcake Bread, Butter Cakes, Cookies Tea, Coffee	Baked Beans Potato Hash Turnip Hash Bread, Butter Cookies, Cake Tea, Coffee	Kartoffelsuppe Raw Sauerkraut Baked Beans Potato Hash Bread, Butter Cookies, Cakes Hot Johnny Cake Tea, Coffee	Pancakes Baked Beans Hashed Potatoes Pickled Bean Hash Bread, Butter Cookies, Cake Tea, Coffee	Hagdown Pot Pie Bean Soup Bread, Butter Cookies, Cake Apple Jack Tea, Coffee	Kartoffelsuppe Baked Fish Tongues Hot Johnny Cake Bread, Butter Cookies, Cake Tea, Coffee
Mug-Up	This fourth meal is served between 9 p.m. & midnight - only when on the Banks fishing, after the day's work is done.	Blood Ends Bread, Cookies Tea, Coffee	Baked Fish Hearts Johnny Cake Bread, Buttes Cookies, Cake Tea, Coffee	Broiled Fish Heads with Pork Scraps & Onions Baked Beans Bread, Butter Cookies, Cake Tea, Coffee	Fish Jowls & Onions Bread, Butter Cookies, Cakes Tea, Coffee	Fish Chowder Baked Beans Bread, Butter Cookies, Cakes Tea, Coffee	After the anchor is hove up, sails hoisted, halyards coiled, and the course set for Cape Broyle, Nfld., for another capelin baiting: Mulligan Stew, Blood Ends, Bread, Butter, Cakes, Cookies, Cocoa, Tea, Coffee.

Kartoffelsuppe - A soup made from cooked flour, potatoes, onions, seasonings, eaten with Sauerkraut.

Scouse - A type of stew made from potatoes, cubed salt beef, onions, pepper and salt.

Blood Ends - Ends cut off the large backbones of cod fish, broiled served with pork scraps & onions.

Hurricane Soup - made from whole dried peas

Fish Eyes - A small round type of pasta about the size and shape of fish eyes.

House Banking - Cooked salt cod pieces covered with fried onions and salt pork scraps.

Hagdown Pot Pie - A type of sea bird found on the Grand Banks

Fisheries Museum of the Atlantic
Lunenburg, N.S.

ACTIVITY SHEET

FOOD FOR THOUGHT

	Onboard a whaleship like the ***Lagoda in the 1850's***	*Onboard a fishing schooner like the* ***Ernestina in the 1890's***	***In your Home at the present time***
What food product is eaten most frequently?			
Which food group is most heavily represented?			
Which is your favorite food?			
Which menu provides the most variety?			
Which of the items could you prepare?			

DAY OF VISIT ON BOARD THE ERNESTINA

Classes arriving at Tonnessen Park will be welcomed by the *Ernestina* educational staff, given a brief explanation regarding the day's activities and informed about safety and appropriate behavior on board the vessel.

As students step aboard, they will be broken into smaller groups of 8-10 in a group. Each group will proceed through three teaching stations. There will be, however, six different stations; roughly half the students will stop at stations **A, B,** and **C,** while the other half is attending stations **D, E,** and **F**.

STATION A - at the helm (the ship's wheel) - focuses on the Captain as navigator and businessman. Physical factors of ocean, weather, equipment and application of workforce are considered as students "step into the Captain's Boots" to examine the challenges and responsibilities of being in command of a fishing schooner. Human and societal factors of personnel management, community dynamics, health and safety are looked at as students discover the Captain's role as leader of a microcommunity and socio-economic unit.

STATION B - in the galley (the ship's kitchen) - students step into the workplace of the ship's Cook to discover the challenges of provisioning, preparing, cooking, serving meals for a Banks fishing crew on a ten week voyage. Calculations of quantity, considerations of storage capacity and capability, the characteristics of certain types of foods will be discussed. An important subject for reflection will be the technology of a galley at different points over the last century. This is a prime location to discuss the subject of proximity on board a ship; galley, dining area and crew's quarters are one contiguous space, which also includes a companionway (ladder/stairway) to the deck, the foremast and a major portion of the available storage spaces for food and other supplies necessary to the crew members.

STATION C - on deck at (and, possibly, in) a fishing dory - students discover and handle the gear of the Fisherman, look at the realities of the Fisherman's work schedule, the magnitude of the tasks, the pay and the social structure of life on the schooner. At some point during this station the group is recruited to raise a smaller sail - by way of reminding them that the Fisherman was also expected to be a qualified deckhand, knowledgeable about the ship and responsible for the proper operation of the vessel as the master of a multitude of crucial skills.

Meanwhile, the other half of the visiting students will be attending three other stations:

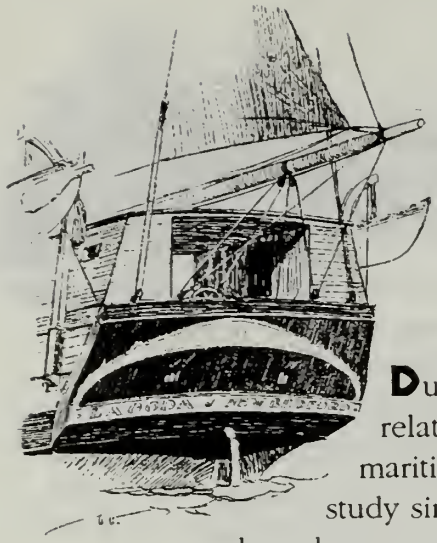
continued

STATION D - in the Captain's cabin - students see the Captain as a decision maker in a medical emergency, having to function as a doctor and a councilor. The cabin itself becomes an emergency room and infirmary. The situation of injury and treatment, the implications of responsibility and care giving become the focus of this station. In the activity a student takes the role of an injured fisherman. Comparative medical technologies (shipboard vs. shoreside; 1890's vs. 1990's), communications technology and rescue techniques, procedure and equipment all can be included in this station.

STATION E - on the forward deck at the anchor windlass (a huge machine used to raise the cast-iron anchor) - students put themselves in the place of the Cook who is now a *deckhand*. Often during a fishing cruise the entire crew of fisherrnen would be out in the dories, leaving the Captain and the Cook alone aboard the ship. The physics, design and operation of the windlass and other pieces of equipment on the foredeck will be the focus of the station, but all within the context of just how two people alone would be able to reposition the ship on the crowded fishing banks if need be.

STATION F - down in the fishold (storage area amidships) - students examine the subject of fish, from the point of view of both fish and **Fisherman.** What are the fishing banks? What fish live there? What else lives there? How many ways have people caught fish in the past? How do they do it now? How many fish can one person catch? What if you catch *too many*? Here a variety of activities and methods will engage students in finding answers, all the while surrounded by the *Effie M. Morrissey* (now *Ernestina*) where New England **Fishermen** caught, cleaned, salted and delivered to market over 580,000 pounds of cod and haddock during her first two voyages in 1894!

Comparing Station Information and Activity (post-visit)- In each case (**A, B, C,** and **D, E, F**) students view the life of the **Captain**, the **Cook** and the **Fisherman**, but from different perspectives. Therefore, after all stations have been completed, students who visited Stations **A, B,** and **C** can then compare their information and experience with students who visited Stations **D, E** and **F**. This can be done back in the classroom as a large group discussion guided by the teacher, it can be done in small group activity or even in pairs. Comparison and reflection will offer the students a more complete picture of life on board the working fishing vessel and may lead to expanded discussion and consideration of other topics.



DAY OF VISIT AT THE NEW BEDFORD WHALING MUSEUM

During their Museum visit, the students will focus on the relationship between Jobs, People, and Tools, as it pertains to maritime industries. To introduce the students to this theme, a case study simulation will be presented exploring an incident that could have happened on a whaling voyage in the 1800's. Students will work cooperatively to solve the problem caused by the "incident," using their experience with Schooner *Ernestina* staff, and previous visits to the Museum as primary reference sources. Questions that require sequencing and critical thinking skills will guide the students in their problem solving.

After the Museum Educator conducts the students through a sample case study simulation and accompanying discussion questions, the students are assigned to small groups. Each group will represent the crew of a fictitious whaleship and receive an individual case study telling of an incident that might have happened during a nineteenth century whaling voyage. Guided by the discussion questions, the students will work towards finding an effective solution to the problem. The teachers will circulate to ensure that good discussion techniques are in place so that each group will be able to demonstrate to their peers how primary reference sources helped them in creating the solution. Keeping with the theme of the relationship between Jobs, People, and Tools, each group will also make a decision about the tools that would be used.

Following the group study portion of the program, the Museum Educator will guide each group in its' presentation of the "incident" and the solutions by asking "What," "How," "Who," and "Why" questions. This part of the program provides an opportunity for all participants to become involved in creatively thinking about various uses of tools, demonstrating how some tools would be used, and becoming more aware of the importance of cooperation in accomplishing a task.

The program concludes by focusing on what we have learned from examples of local maritime history, what maritime life is like today, and what it will be in the future.

VOCABULARY

ABEAM The wind is abeam when it is blowing directly on the windward side of a vessel.

ABOARD (1) To go aboard a vessel. (2) To row alongside in a dory.

ABOUT To change the vessel's course from one tack on the wind to another.

ADVANCE Money allowed to whalemen before starting a voyage, for the purchase of outfits. An advance was charged against subsequent earnings.

AFT An adverb indicating direction or position near or toward the stern of a vessel.

AGENT The managing owner of a whaleship.

ALOFT Up in the rigging, above decks. On the masthead, the lookout is aloft watching for a school of fish (or a pod of whales).

AMBERGRIS An inflammable fatty substance sometimes found in the intestines of sperm whales, used in the preparation of perfumes.

ANCHOR A fisherman's anchor is designed to hold on well; fishing vessels carry three sizes: *sheet anchor*, *best bower*, and a *spare anchor*. "Anchor's aweigh," when it is clear of the bottom as the cable (or chain) is hove in (pulled aboard the vessel) while getting the vessel underway (moving). An "anchor watch" is kept when a vessel is riding at anchor on the fishing Banks.

ARTICLES OF AGREEMENT Contract between shipowners and crew. It detailed a code of conduct, disciplinary measures and penalties, entitlements to pay, rations, leave and living space aboard.

ASTERN The vessel in the rear; behind another. When the seine-boat or dories are made fast (tied on) astern of the schooner.

BAIT The bait used on fishing vessels consists of salted clams, menhaden (porgies), fresh mackerel, herring, squid, capelin and Bank clams. "Baiting up" - the crew cutting bait and baiting the hooks on their trawl lines.

BALEEN Comblike plates hanging from the upper jaw of many large whales, used to strain small prey from seawater. Baleen is also called whalebone.

BALLAST Pig iron, sand, or other weighty items used to stabilize a ship.

BARREL A barrel existed aboard a whaleship only as a unit of measurement for oil: 31½ U.S. gallons. Oil was carried in casks.

BELOW To go down below decks to a cabin, the forecastle (fo'cas'le) or the vessel's hold.

BERTH (1) The bunks in cabin and forecastle where men sleep. (2) Three feet of space along the rail where men stand to fish with hand-lines. (3) "Making a berth" - changing position of the vessel to new fishing grounds. (4) "A good berth" (trawling) allows two miles between vessels. When hand-line dory fishing - one mile to the nearest vessel.

BLACKSMITH A person who works, repairs and shapes iron with a forge, anvil and hammer; a man who shoes horses.

BLANKET PIECE One of the large pieces of blubber, from 12 to 15 feet long and 5 to 6 feet wide, cut from the whale in the initial cutting-in process.

BLOCK AND TACKLE A combination of line and two or more large pulleys used for lifting or difficult-to-move objects.

BLOW Cloud of moisture-laden air exhaled by whales (also known as "spout"), may be used to describe the act of breathing..

BLOWHOLE Nostril(s) on the top of the head of a whale.

BLUBBER A thick layer of fat between the skin and the muscle of a whale from which oil is obtained.

BOATBUILDER A person who builds the small whaleboats lowered to hunt whales.

BOATHEADER The officer in charge of a whaleboat. The boatheader steered the boat to the whale. After the boatsteerer (harpooner) fastened to the whale, he changed places with the boatheader whose duty it was to kill the whale.

BOATSTEERER The harpooner (a term seldom, if ever, used by whalemen). The boatsteerer manned the first oar and struck the whale. After fastening to the whale, he changed places with the boatheader and steered the craft while the boatheader killed the whale.

BOILING Trying out the blubber. Pieces of blubber were placed in pots set in a brick oven on deck. A fire was lit beneath the pots and the fat melted from the blubber's connective tissue.

BOW The front or forward part of a ship or boat.

BOWHEAD WHALE (BALAENA MYSTICETUS) The object of the Arctic fisheries. The whale that carried more oil and longer plates of baleen than any other whalebone whale. So named because of the great arc of its rostrum. Also called in the eastern Arctic, the Greenland whale and the Arctic right whale; and in the western Arctic, the steeple top, polar whale, and Roys's whale.

CASK A barrel-like container made in different sizes and used on ships to store supplies and cargo such as whale oil.

CAULK To fill spaces between planks on a wooden ship or boat with oakum (old rope picked apart) to prevent water leakage.

CAULKER A person who caulks boats, ships, etc.

CHART Charts are to the water and coasts what maps are to the land. They show landmarks, contours of the lands, the depths of water, shoals and reefs, aids to navigation and information concerning tides and currents, etc..

CLIPPER A ship design developed and perfected by New England naval architects (designers) and shipwrights (builders) during the nineteenth century (1800's).

COD One of the principal species of fish caught on the fishing Banks.

COOPER A person whose work is making or repairing barrels and casks.

CORDAGE Line or rope of various types and sizes.

COURSE The direction in which a ship is sailed in making her way from point to point.

CRAFT Whaling craft included weapons of attack: the harpoon, lance and long-handled cutting spade.

CUT IN, TO The process of removing the blubber and whalebone from a whale.

CUTTING SPADE A wide, flat, long-handled chisel-shaped implement used on the cutting-stage to cut blubber off the carcass of a whale.

DART, TO The iron was darted, hove, pitched, or tossed--but never thrown.

DORY Individual fishing boats used by fishermen on the fishing Banks. Flat-bottomed with removable plank seats, these boats can be stacked together or "nested" on the deck of the schooner.

DRESSING-DOWN Cleaning and preparing the fish for storage in the vessel's hold. The crew worked hard at dressing down a "deck of fish."

DUCK A very durable, closely woven, heavy cotton or linen fabric.

DUFF A mixture of flour, yeast, raisins, and lard that was served as a pleasant change from salt horse.

FATHOM A fathom is six feet long. Ocean depths are often expressed in fathoms and all ropes and lines are roughly measured in fathoms by simply pulling out the rope the length of a man's arm-span.

FITTING-OUT Gathering resources, assembling equipment and gear to ready a vessel and her crew for a trip on the fishing Banks. The term can be applied to a vessel or to personnel.

FLUE The barb of a whaling iron.

FLUKES The whale's tail.

FORECASTLE (FO'C'SLE) The forwardmost part of the ship. Or, the crew's living quarters in the forward part of the ship. Pronounced "fok'sl."

FOREMAST HANDS The ship's crew distinct from the officers.

FURL To gather and roll up a sail on the boom and fasten it with stops (small pieces of rope).

GALLEY A ship's kitchen.

GALLIE OR GALLY To startle or frighten a whale.

GANG While hand-line dory-fishing on the Bank, the crew are equally divided in two gangs: the starboard-gang and the port-gang. The skipper always eats with the starboard-gang; his seat is on the starboard-locker at the foot of the table near the gangway.

GANGWAY The entrance to the forecastle and the cabin.

GEAR A general term for all running-rigging and fishing equipment. Trawlmen go out in their dories to haul (pull in from the ocean) their gear (fishing lines with hooks and buoys). When in port they overhaul (repair) their gear.

GEORGES BANK A famous fishing ground due east of the New England coast, south of Nova Scotia.

GEORGES MAN A vessel whose crew fish with hand-lines for cod and halibut, from deck, on Georges Bank.

GROUND (1) To run a vessel aground; to strike bottom. (2) The fishing ground; the area where schools of fish are found in great numbers.

HAND (1) A fisherman, one of the crew, an old hand. (2) To give a hand and furl the sail. (3) A new hand - a man recently shipped on a vessel. (4) A greenhand - a man on his first trip.

HANDLINER A cod fishing vessel whose crew fish from dories with the hand-line on a salt trip.

HARPOON A spear-like instrument with a barbed head used for fastening onto whales or large fish to capture them.

HATCH An opening in the deck allowing access to a vessel's interior.

HAUL (1) To pull on a line; as in hauling up the sail. (2) The catch of a fishing voyage; it was a large haul of mackerel with the purse seine. (3) To haul out is to put the vessel on dry land for cleaning or repairs to the hull.

HEAVE To lift or move something - we were told to heave the anchor.

HELM The point of control for a vessel's rudder - a wheel, sometimes a tiller; the position of control - "the son took over the helm from his father and did a good job managing the crew."

HIGH-LINE (1) The vessel that makes the largest stock (catches the most fish) during the season. (2) The skipper who lands the most fish during the season. (3) The man who catches the most fish during a trip.

HOLD A large compartment below deck used for storing cargo or provisions.

HULL The body of a ship exclusive of masts, yards, sails, rigging, and deck-houses.

HUMPBACK (MEGAPTERA NOVAENGLIAE) A whale usually disdained by the Arctic whalemen because of its speed, small amount of blubber, and useless baleen. Humpback blubber had no resiliency and hence the blubber hooks tended to tear right through it. Humpbacks also usually sank after death.

IRON The name applied to the harpoon. Whalemen rarely, if ever, referred to the iron as a harpoon. "Iron" meant not only the iron barb and foreshaft but also the entire instrument, including the shaft and iron strap.

KNOT A nautical mile of 6,082 feet. The statute mile is 5,280 feet.

LANCE The instrument used for killing whales. About 11 feet long, it consisted of a wood shaft, a palmate blade at the end of a 6-foot metal shaft, and a lance warp.

LAY The whaleman's or fisherman's share of the profits of a voyage.

LEEWARD The side opposite the wind - the dory was protected from the breeze as long as we kept it leeward (on the lee side) of the schooner.

LINE Rope.

LOGBOOK The official record of a voyage.

MANIFEST A document necessary when entering or clearing a ship at the customhouse. It contains ship's name, port of registry, registered tonnage, master's name, information concerning marks and numbers on cargo packages--in fact, full particulars of ship, voyage, crew, passengers, and cargo.

MARINER A sailor; a seaman.

MATE A ship's officer.

OAKUM Fibers of tarred hemp used for caulking seams.

PAINTER A length of rope attached to a small boat for towing and tethering purposes. A fishing dory has a painter three fathoms long.

PORT The left side of a ship when facing forward; or, a harbor.

RIGGING Line, wire, chain, etc., used to support a ship's masts and handle the sails.

RIGHT WHALE (EUBALAENA GLACIALIS) A whale similar in many respects to the bowhead, it is easily differentiated by the large barnaclelike callosity on its nib. It is found in the temperate waters of the Atlantic and Pacific.

SAILMAKER A person who makes shaped sheets of canvas for sailing vessels.

SALT HORSE The common name aboard ship for salted beef.

SCHOONER A New England fishing schooner has two masts, booms, and gaffs, rigged with fore and aft sails.

SEINE A net - the purse-seine - is cast like a circular curtain from a smaller boat around a school of fish; then the bottom is drawn together like a purse or pouch, trapping the fish.

SHEATHING An exterior covering, either wood or metal, on the underwater part of a ships hull, to protect against marine growths or damage.

SHIPSMITH A blacksmith who makes iron things for a ship.

SHIP'S PAPERS Documents required to be held in a vessel as a manifest of her ownership and of her compliance with legal requirements. They include the Certificate of Registry, license, log book, ship's articles, bills of lading and so on.

SHIPWRIGHT A person whose work is building ships.

SHOOKS Barrel staves. They were sent out numbered and knocked down in casks for ease of stowage.

SLOP CHEST The ship's store, which sold clothes, knives, tobacco, and other items.

SPERM WHALE (PHYSETER CATODON) The largest of the toothed whales, rarely taken north of the Aleutians by American whalemen.

SPERMACETI A fatty substance contained in oil of a sperm whale; it is used in preparing candles and cosmetics.

STARBOARD The right side of a vessel when facing forward.

STAVES Long, narrow curved pieces of wood which make up the side of a cask.

STERN The aftermost part (back) of a ship.

TRIP This word can mean a voyage or the *results* (the fish) of a voyage as in: *we sold the trip for a good price in Gloucester.* (1) A full trip - vessel loaded with a full fare of fish. (2) A round trip - from time of leaving port until time of return. (3) A broken trip - when a vessel returns with only a few fish.

TRY OUT, TO To render oil from blubber.

TRYPOT An iron cauldron set over a fire box for trying out blubber.

TRYWORKS A brick oven, usually set aft of the foremast, in which pots were set for trying the oil from blubber.

TUG [BOAT] An engine-driven boat (not a sailboat) only used to pull or push other boats or barges from one place to another.

UNDERWAY A vessel with sails set. To get underway - to hoist sails and heave the anchor.

WATCH A portion of the ship's company on duty at a given time to run the ship.

WHALEBOAT A small open boat, from 28 to 30 feet long, used for chasing whales.

WHALEBONE Baleen.

WHALE OIL The oil from baleen whales, distinct from the more highly prized sperm oil.

WINDWARD Direction from which the wind blows.

TEACHER'S RESOURCE

COMPETITION TO BE "HIGH-LINE" FISHERMAN

There is usually great rivalry among several members of the crew on a hand-line dory cod trip, as to who among them shall be "high-line." Most of us fished and worked very hard the whole trip, for we considered it a great honor to be called a "high-line" fisherman, and he, of course, would make the most money, and the "low-line" the least. On the *Elgin*, that trip, two of our crew were men we had shipped at Shelburne. They were brothers and both were "high-line" fishermen, but this was the first trip they had ever been shipmates. During the first half of the trip, Bill fished very hard and was some 300 fish ahead of his brother Nate. One day Nate told Bill that he was very foolish to fish and work so hard while we were fishing in deep water (35 fathoms). "Wait 'til we get down in shoaler water an' I'll show yer who'll be high-line this trip," I heard him say. Sure enough, he did show Bill, and all the rest of us, how he could catch fish on the latter part of our trip, for when we had the *Elgin* full and left for home, Nate was "high-line" with 6,600 fish, and Bill had just about an even 6,000. Nathan Monroe was a fine fellow, one of the best men I ever met in my life, and he was the smartest hand-line dory fisherman that I ever went shipmates with. I was 7th line with 4,500 fish (an average share) and the youngest on board the vessel. The low-line had about 3,000 fish. The total number in count for the *Elgin's* trip, was about 64,000, over half of them large fish. When she arrived home on June 7th, she was very deep, and when she lay alongside the wharf, her scuppers were in the water, for she had brought in the largest trip of salt cod (840 tubs, 1260 quintals), landed at Southport for many years.

PAY SYSTEMS

The crew on "trawlers" go on a different "lay" than the "hand-liners," and perhaps it will be well for me to explain here the different "lays." The crews on trawlers for either cod, haddock or halibut, also the crews on all mackerel seiners, the gill-net mackerelnetters, also codnetters, and swordfishermen, the flounder-draggers and herring-netters, "all share and share alike." The gross stock is divided: one half goes to the owners of the vessel, the other half is divided among the crew. The owners furnish the vessel, dories and trawl-gear, salt, bait and stores and pay the skipper his percentage, which is usually from 5 to 7 per cent, out of their half. The crew pay the cook his wages, which is usually from thirty-five to forty-five dollars per month; this is first deducted from their half. The remainder is divided equally among all the crew, including the skipper and cook, for they receive a share, as well as their per cent and wages.

All hand-line fishermen for cod, halibut, mackerel, and pollock, have half the money their fish bring, each man sharing in proportion to his own catch. The other half goes to the owner of the vessel. The "high-line" earns the most money and the "low-line" the least; all the rest share in between. The skipper has half the money his fish brings, and his percentage extra. The cook has half the money his fish brings, and his cook's wages extra. This method is called by the fishermen "fishing on halves." When a fishing vessel brings in a large trip of fish that sells for a fair price, she will make a good stock, which means the gross earnings for her trip.

Pierce, Wesley George. *Going Fishing* International Marine Publishing Company. Camden, Maine, 1989.

GROWING UP IN A FISHING FAMILY

The night I was born (Jan. 17th) my father was in a Gloucester vessel on George's Bank, where they were riding out a heavy northeast gale, during a blinding snowstorm. The great anxiety on the part of her skipper and his crew that night, was that some vessel in the large fleet anchored on the Bank to wind'ard of them, would part her cable or drag her anchor, and drift down afoul of them, when both vessels would be quickly smashed to pieces and all hands lost. Their skipper gave orders for the "watch" on deck to keep sharp lookout to wind'ard for any drifting vessels and to have an axe ready at hand for instant use to cut the cable (one blow would be enough for the cable was then under a terrific strain) should they see anything coming. It was almost impossible for a man to look up to wind'ard that night, for the blinding snow, hail, and frozen spray, cut like knives against his face and eyes. It was pitch-black darkness and a howling storm. All that anyone could possibly see would be the flash of a riding-light a few yards away, if a vessel was adrift and coming down fast under their vessel's bow. No vessel fouled them, however, and they rode out the gale in safety. Those men did not fear the heavy gale and angry seas that night, but they did fear collision. That was the real danger for them.

Thick, foggy weather is dreaded by most fishermen, more especially so by all skippers, for then it is a time of great anxiety, for fear some of their dories may go astray and the men become lost. Many such cases are on record where men have been lost in their dories for days and suffered greatly from cold, hunger and thirst before they were picked up by some other vessel or steamer. Fog is the greatest menace of the sea. When we were out in our dories fishing in foggy weather, we generally could keep run of our vessel and knew in what direction she lay, when it was time for us to go aboard. But sometimes, in moderate weather, the wind died out and it was calm for awhile, and when it breezed up again it would be from another quarter and we perhaps had not noticed the change which had taken place. On this same trip, one day we were out in the fog and just such a change of wind took place. I thought I knew the direction in which the vessel lay and when it was time to go aboard I hauled in my dory-anchor and started rowing. Pretty soon I met another dory going in the opposite direction, and the man hailed me and said: "Where yer going George?" "Going aboard," I replied. "Yer rowin' the other way from th' vessel!" he said. "Are you sure, Joe, that you are right?" I asked him "Sure? Yes!" he replied. "Didn't yer know th' wind shifted 'bout an hour ago, George?" "No," I replied. I had not noticed that the wind had shifted as I was busy fishing, for it was my first trip & a dory, and without much experience in fog on the Bank, it was easy to lose my sense of direction.

One day when we were all out in our dories fishing, the skipper set the signal at one o'clock P.M. for us to come aboard the vessel. I was fishing down to leeward about half a mile, and as the fish were biting well I was pretty busy trying to get a dory-load of them, so did not see the signal when it was set. Then I heard a gun fired and looking toward the vessel I saw the signal and could see father up in the main rigging swinging his hat. Then I noticed for the first time that it was black and threatening to wind'ard, with a bad squall coming down on us fast, so I jumped into the bow of my dory, quickly hauled my anchor in, and started rowing as hard as I could toward the vessel; but before I got half way aboard, the squall struck. I rowed as hard I could for perhaps half an hour, then realized that was making no headway at all, and had about made up my mind to throw out my anchor and try to hold on, then I looked around toward the vessel and saw two men in a

continued

dory coming down after me. As they got down alongside, I threw them my dory-painter, and the three of us rowed hard for more than an hour, before we got up alongside the vessel. When we finally got there I was very tired from my long, hard row, and father must have realized it for he said to me: "Climb in on deck, son. I'll pitch out your fish!" Father jumped into my dory and pitched the fish out on deck and when he had finished, he climbed out on deck and said: 'Young man, the next time I set the signal for the dories, you get your anchor and start at once for the vessel. I hope you have learned your lesson well today and don't you ever forget it." I never have forgotten, for I am telling you about it now.

PIERCE, WESLEY GEORGE. *Going Fishing* INTERNATIONAL MARINE PUBLISHING COMPANY. CAMDEN, MAINE, 1989.

ORIGIN OF TERM: SCHOONER

She was sharp on the bottom and fast, and, on being launched, sped over the water so fast from the impetus gained by descending from the ways as to elicit from a bystander the remark, "See how she scoons." "Scoon" was a word used by plain people to express the skipping of a flat stone over the surface of the water when skillfully thrown, and the builder of the vessel, having been somewhat at a loss for a name for the new rig, seized upon the trifling incident referred to and replied, "A scooner let her be," and two-masted vessels, with jibs and fore-and'aft sails, have since been called by that name. The advantage possessed by the "schooner" (as the name is now spelled) is that the canvas of the vessel is divided into a large number of sails, which are more easily handled than the large sails of a sloop could be, each containing the same amount of cloth. The schooner quickly superseded the sloop in the banks fisheries and in all others requiring voyages of any duration. Carrying twice as many men as a sloop, and making quick trips, a schooner could catch as many fish as two vessels of the other style, and were large enough to carry their own fish to foreign markets. Since the Revolutionary War they have been the only vessels employed by Americans in the banks fisheries.

PIERCE, WESLEY GEORGE. *Going Fishing* INTERNATIONAL MARINE PUBLISHING COMPANY. CAMDEN, MAINE, 1989.

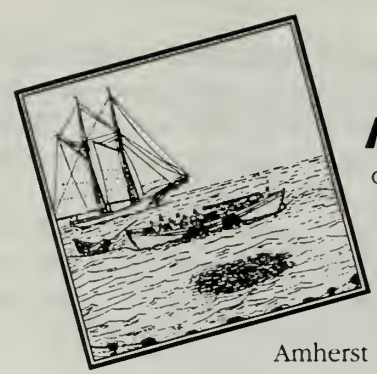
FISHERMEN'S PAY

Fishermen do not of course labor at regular wages. The business is carried on on shares. The vessel has a certain share of the general catch. The captain has a share for his additional trouble and responsibility. An account is kept of provisions and fish-bait used, and this is fairly averaged among the crew. Each man keeps his fish separate, and when they are "packed" (that is to say, inspected and sorted), he receives either his net share of the fish. or their equivalent in money at the highest market price.

Sometimes, young men make a different arrangement, which is called "fishing for halves." They agree with some one ashore, generally a packer or inspector, to give him all their catch, he paying them in return one half its value, in cash, and taking the risk of making a clear profit from the balance. If the season is favorable and the fisherman has good fortune, the shoresman makes money by this, while if the catch is small, he loses —the provisions and other incidental expenses averaging as high in one case as in the other.

Through the kindness of a friend, I was introduced to a gentleman who, in consideration that I was to go in the *Mary Hawes*, agreed to let me fish for him at "half-line." This arrangement gave me great satisfaction, as it reduced my chances more to a certainty; and I felt just then a strong desire to make them as certain as possible.

NORDHOFF. CHARLES. *Whaling and Fishing* DODD, MEAD & COMPANY. NEW YORK. 1895.



PURSE-SEINE FISHERY

Mackerel are caught with the purse-seine when they are schooling on or near the surface of the sea. The first purse-seine known to Southport fishermen was in the early sixties. It was a very crude affair about one hundred fathoms long and ten fathoms deep, knit of rather coarse twine which made it very bulky, heavy and hard to handle. The first one I know anything about was brought there from Boston in 1864 by Amherst Spofford. It was bought by ten fishermen at Cape Newagen, who formed a stock company and secured a small fishing vessel named *Niagara*. They also purchased a large, square-sterned boat. A purse-seine in those days cost quite a sum of money ($2,400.00), for it was in wartime and cotton twine was very high in price. But so were mackerel, for they brought about $30.00 per barrel. That purse-seine had only about one fourth the amount of twine, but it cost three times as much as a seine did during the eighties, when we were fishing with a purse-seine that was two hundred and twentyfive fathoms long and twenty-two fathoms deep and was made of fine cotton twine steam-tarred. These men at Cape Newagen caught a lot of mackerel with their seine, in the nearby waters, and did well, making some money. Soon after that date (1864), other vessel owners, all along the coasts of Maine and Massachusetts, bought purse-seines for their vessels and in a few years' time there was quite a large fleet of seiners, perhaps 250 sail.

TRAWL LINE FISHING FOR COD

Trawl-tubs are used in which to coil the trawl so that it can be more easily handled, and also to prevent the trawl-line from fouling or snarling. Most trawl-tubs are made by sawing a barrel in halves making two tubs. Each "tub-o'-trawl" is rigged in the following manner: ground-line, 300 fathoms, 300 No. 14 cod-hooks, 300 gangings, each three feet long and six feet apart (one end of the ganging is bent on the ground-line, and the hook is made fast to the other end); two buoys, two buoy-lines and two 16-pound anchors (one at each end) to hold the trawl fast when it is set on bottom. One end of the buoy-line is made fast to the anchor before it is thrown out, the other end reaches up to the surface and is bent onto the buoy. Vessels using trawls for cod, haddock and halibut off shore use dories 15 feet long on their bottom, two men going in each dory. The trawlers carry all the way from six to twelve dories, according to the size of the vessel. Each dory sets from four to six "tubs-o'-trawl" when fishing out on the Banks. The fishermen bait their trawls aboard the vessel, using fresh bait (iced or frozen) of menhaden (porgy slyvers), mackerel, herring, squid, clams, or capelin. These fish are slivered (slyvered), and cut up in small pieces about an inch square. One piece is put on each hook.

Pierce, Wesley George. *Going Fishing* International Marine Publishing Company. Camden, Maine. 1989.

THE COST OF A FISHING VESSEL

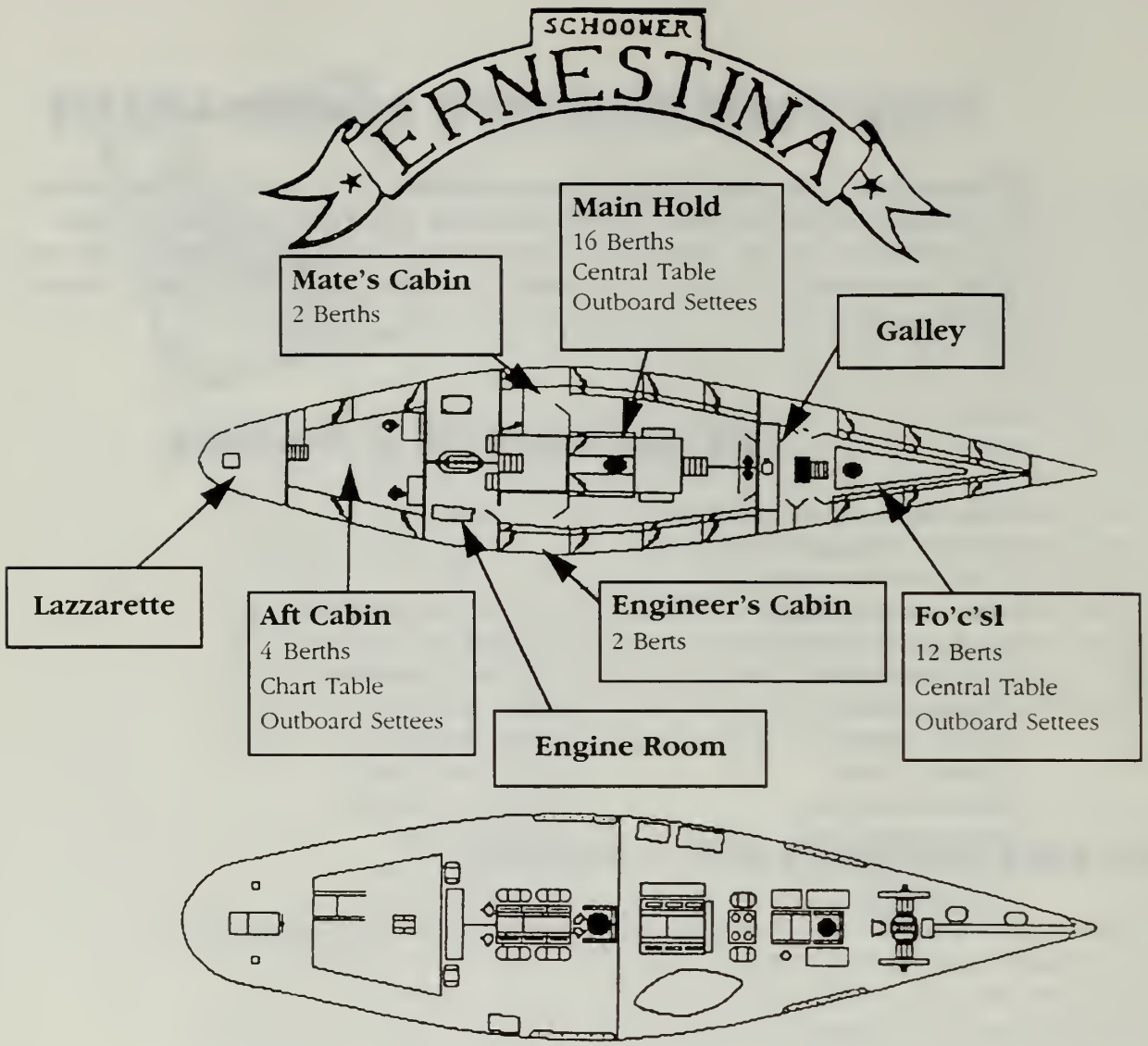
From first to last, about thirty distinct trades are concerned in the collection of the material for a fishing schooner and the construction of a vessel. The largest part of the cost is for material. Fishing schooners were built in 1880 for from $55 to $65 per register ton. The cost of a 75-ton vessel was about $5,000; the amount paid out in the ship-yard for labor of building was about $1,900.

THE FINANCES OF A VOYAGE

The outfit of such a vessel for a five-weeks' mackerel trip for a crew of master and 14 men was:

1 Seine, costing $850.
40 hogsheads of salt, $70.
1 seine-boat, $225.
400 barrels, $400.
4 barrels of flour.
2 barrels of beef.
l00 pounds of pork.
120 pounds of sugar.
25 gallons of molasses.
½ barrel of beans.
25 pounds of dried apples.
25 pounds of cornmeal.
10 gallons of kerosene.
10 pounds of coffee.
50 pounds of lard.
60 pounds of butter.
10 bushels of potatoes.
1 bushel of peas.
10 pounds of rice.
50 pounds of oatmeal.
Other small stores, costing about $40.

Pierce, Wesley George. *Going Fishing* International Marine Publishing Company. Camden, Maine. 1989.



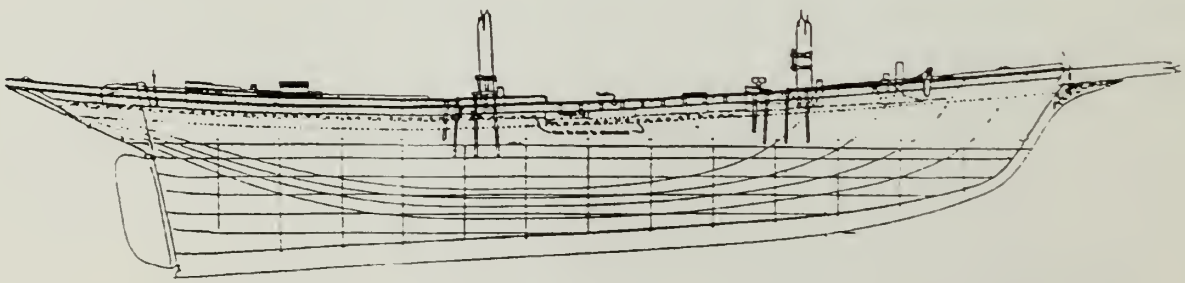
Statistics

Sparred Length Overall: 156 ft.
Length at Waterline: 93 ft.
Beam: 24 ft. 5 in.
Draft: 13 ft.
Gross Tonnage: 98 Tons
Displacement: 240 Tons
Designer: George M. McClain

Builders: James Tarr Shipyard, Essex, MA
Launched: February 1, 1894

▼

Onboard Educational Staff: 12
Capacity for Events: up to 80 persons
Educational Day Programs: up to 65 participants
Overnight or Multiday: up to 24 participants



TEACHER'S RESOURCE

SUGGESTED ACTIVITIES FOR EITHER BEFORE YOUR VISIT OR AFTER YOUR VISIT TO THE NEW BEDFORD WHALING MUSEUM

A. Imagine that you live on a farm in 1850. Your dream is to go to whaling. Write a letter to a friend who has been on a whaler. Ask him any questions you have about life aboard a whaler. Tell him what you will miss about the farm and what you will be happy to leave behind. Have another person in your class be your friend and respond to your letter.

B. Knowing that they would be away from home for years, many seamen had either their portrait painted or a photograph taken of themselves to leave with a loved one as a memento; a remembrance. Imagine yourself sitting for a portrait. Plan the scene, what will you wear, what will you include in the picture that will tell about you and your interests?

C. Write and perform a brief play with the title - **ON BOARD A WHALESHIP**
Some possible scenes are:

1. Preparing to leave home.
2. The first few days on board the ship.
3. The sighting and capturing of a whale.
4. Trying out blubber.
5. Visiting a South Sea island.
6. Returning home.

D. How were sea captains able to find their way across the oceans without getting lost? Describe the methods used by sea captains now and in the whaling days of the 1850's.

E. Research sailors' knots, make a display board showing different types of knots.

F. Imagine that you are a whaleman preparing for a voyage that will last three to four years. You can take only those things which you will need the most and that will fit into a seamen's chest. Make a list of the items you will need and want to bring with you. Compare your list with someone else's. Explain your reason for choosing the items you did.

G. Log books not only gave daily accounts of a whaling voyage, the weather and location, but they also presented a visual account of the days when whales were sighted or killed. Write an imaginary entry in a log, including information on all of the above. Whales' images were made with a wooden stamp. Illustrate your log by making a whale stamp out of a potato.

H. Illustrate a blank map of the world. Name the oceans, seas and continents a whaler might explore while making an around the world search for whales. Research and locate some of the many ports at which a whaler might stop for supplies and repairs. Present this information in the form of a play, a travelogue or a panorama.

I. Before motion pictures, historic events and far away places were portrayed on huge canvas rolls that were hand cranked with each scene moving across the stage. These were called panoramas. Create your own panorama depicting an historic event. Use a box as a stage and paper towel rolls or dowels to unfurl the narrative picture.

J. Whalemen occupied idle hours with an art form called scrimshaw, carving whale's teeth, bones and baleen into useful and decorative objects.
Designs and pictures were carved into these materials usually with a sail needle and darkened with lamp black. Make your own scrimshaw using either grocery store meat containers, empty bleach bottles, or sea shells and darken with paint or ink.

K. Make papier mache whales using oval shaped balloons with cardboard flukes taped to the end. Once covered and dried, paint and add final whale-like touches.

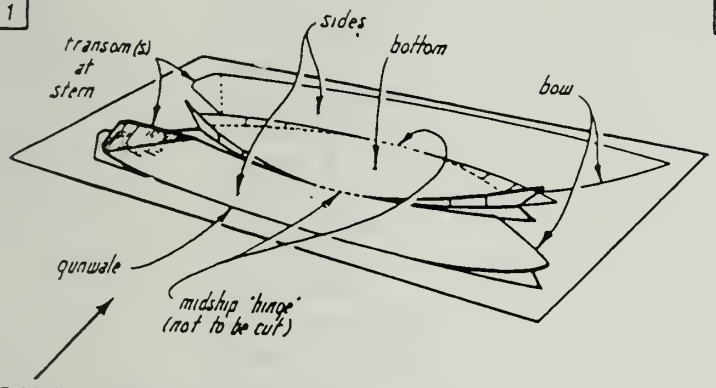
L. Go to the library and find short stories and poems about whales. Make up your own stories, poems or myths about whales.

M. Make a time line indicating the major changes in the source of light between 1800 and 1900.

INSTRUCTIONS

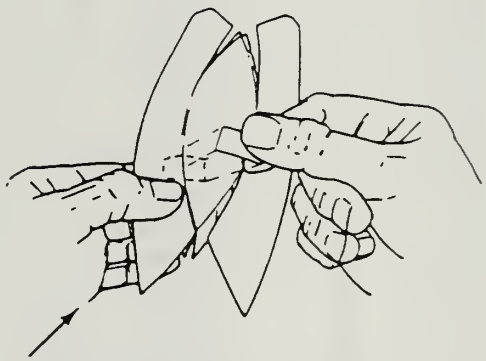
FOR MAKING A PAPER DORY

1



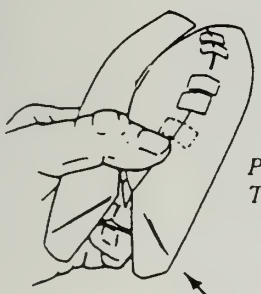
Fold the tabs along the bottom upward.
Fold the sides upward along their midship "hinge."
Fold the transoms inward.

2



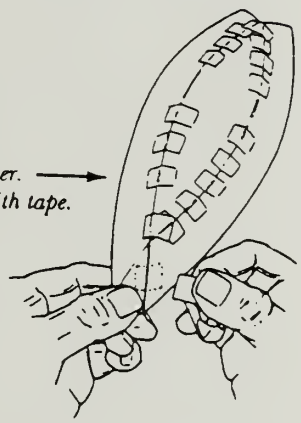
Draw together sides and bottom, starting from the middle of the boat and working toward the ends

3



Tack sides and bottom together with temporary swatches of tape on the outside of the hull.

Pull the stern together.
Tack temporarily with tape.



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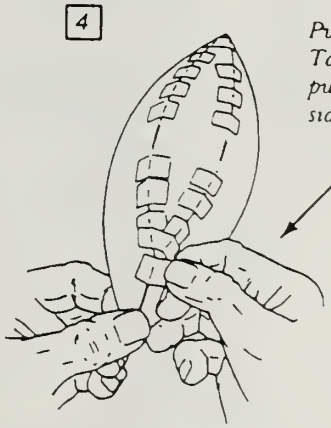
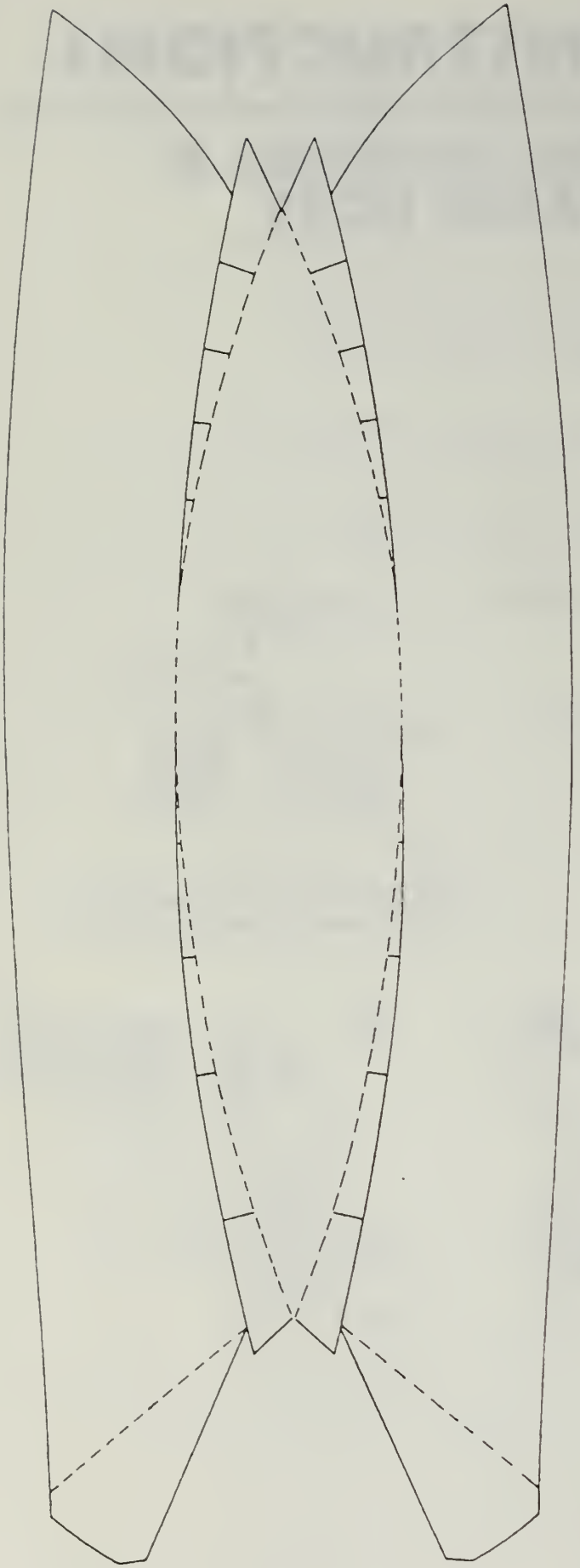


Pull the bow together
Tack with tape swatches pulled tightly from one side to the other



ACTIVITY SHEET

MAKE A PAPER DORY

✂ *Solid lines are to be cut. Dotted lines are to be folded*

TEACHER'S RESOURCE

OUTFITTING A WHALESHIP
SHIP *ATKINS ADAMS*

The following is a list of some, but not all, supplies and equipment purchased to outfit the whaleship *Atkins Adams* for her voyage 1850-1854 in search of sperm whales.

1850	COMPANY/PERSON	ITEM	COST
July 2	Ruben Adams	8 Bbls. Tar	$ 14.85
	J. Bourne	20 cords wood	109.38
	Robt. Hooper	duck	341.44
	Henderson Inches	copper	1504.93
	Joshua Delano	cedar boards	22.24
	Joseph Blossom	wood	13.49
	Adam Hathaway	caulking	192.65
Aug.2	Andrew Snow	Bricks	24.50
	Randall Brothers	Paints	159.80
	Hayward Osgood	beans	16.60
	Gardner & Thayer	Hardware	161.12
	Harrison Fay	Hams	59.67
	William Ashley	Flags	4.75
	Alfred Gifford	Butter	173.28
	Hitch Taber	Sailmaker	178.97
	James B. Ransen	rivets	32.74
	Wright & Whitman	duck	107.63
	Peleg Drew	Iron Poles	10.75
	Barrow & Corey	Tobacco, Soap	309.03
	Simpson Hart	sail duck	513.08
	David R. Green	Copper nails	85.07
	R. S. Kirbey	Trypots	35.00
	Weston Howland	oars	36.54
	Chenery Shaw	Wine & Brandy	21.33
Sept.	N. S. Higgins	lumber	118.06
	Gardner & Thayer	shovels	1.42
	H. P. Willis	1 Bucket	3.00
	S. G. Nye	beef & pork	102.40
	D. R. Green	corn	11.52
	Isaac Norton	boots	92.00
	William Baker	potatoes	25.05
	Wm Edwards	flags	4.32
	Franklin Hatch	cask	672.42
	Jethro Taber	craft	53.76
	Warren Delano	sheathing	9.85
	P. Merrehew	blacksmith tools	147.34
	Dexter Jenney	leather	121.00
		Water	25.00

continued

TEACHER'S RESOURCE

OUTFITTING A WHALESHIP
SHIP *ATKINS ADAMS*

1850	COMPANY/PERSON	ITEM	COST
	Albert Sawin	cordage	$ 1005.53
	Albert Sawin	Ballast	25.80
	P. Fuller	oil rosin	4.50
	N. & J. W. Lawton	vegetables	24.98
	Natht Church	nails	131.36
	Seth Shaw	pork beef	8.79
	Edward M. Robinson	oil soap	37.75
	Enoch Taber	cabbages	2.18
	Le Barron	30 bushels charcoal	3.75
	E. Sawin	planing lumber	8.27
	Charles Bosworth	boat	80.30
	Thos Bates	sawing wood	10.80
	Geo T. Barker	vinegar	26.31

TEACHER'S RESOURCE

HOW A WHALESHIP PREPARED FOR A VOYAGE

OBJECTIVE: *Students will understand that a variety of equipment and materials was necessary to prepare a whaleship for a four-year whaling voyage, that many people and industries were involved, and that it was expensive.*

MATERIALS NEEDED:

- Chapter 3, "An Arctic Whaling Voyage," *Whales, Ice and Men*. John R. Bockstoce
- "Outfitting a Whaling Vessel: Ship *Atkins Adams*"
- White composition paper

PROCEDURE:

- Read Chapter 3 to students.
- Discuss chapter.
- Using "Outfitting the Whaleship: Ship Atkins Adams," students will categorize the items listed.
- Set up composition paper with the following five categories across the top of the paper:

FOOD STUFFS	RIGGING AND SAILS	REPAIRS TO SHIP	WHALING AND OIL PREPARATION	SAILORS COMFORTS

BIBLIOGRAPHY

TO FIND OUT MORE ABOUT NEW BEDFORD AND THE FISHING/WHALING INDUSTRIES

THE FOLLOWING BOOKS ARE RECOMMENDED

Ashley, Clifford W., *The Yankee Whaler*, Boston: Houghton Mifflin Co., 1926.

Bockstoce, John R., *Whales, Ice, and Men*, Seattle: U. of Washington, 1986.

Ellis, Richard, *Men and Whales*, New York: A.A. Knopf, 1991.

Melville, Herman, *Moby-Dick*, 1851. Norton Critical Edition, 1967.

"Moby-Dick and the Tools of Whaling," ODHS-New Bedford, MA., 1983.

Nordhoff, Charles, *Whaling and Fishing*, Dodd, Mead & Company, New York, 1895.

Pierce, Wesley George, *Going Fishing*, International Marine Publishing Company, Camden, Maine, 1989.

MOST OF THE ILLUSTRATIONS IN "WORKING ON WATER" WERE DRAWN BY GORDON GRANT. THEY CAN BE FOUND IN THE COLLECTION OF OLD DARTMOUTH HISTORICAL SOCIETY-NEW BEDFORD WHALING MUSEUM AND APPEAR IN: Grant, Gordon, *Greasy Luck*, William Farquhar Payson, The Stratford Press, Inc., New York, 1932.